

## Prof. İLKER YILMAZ

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: A-3082-2016

ScopusID: 57213311583

### Education Information

Post Doctorate, The University of Iowa, College of Engineering, Department of Mechanical Engineering, United States Of America 2008 - 2009

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Anabilim Dalı, Turkey 2001 - 2006

Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Makina Mühendisliği Anabilim Dalı, Turkey 1999 - 2001

Undergraduate, Erciyes University, Mühendislik Fakültesi, Makina Mühendisliği, Turkey 1995 - 1999

### Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Hydrogen Technologies and Fuel Cells, Fuels and Combustion, Computational fluid dynamics, Aerospace Propulsion, Aerodynamics, Aircraft Propulsion Systems, Engineering and Technology

### Academic Titles / Tasks

Professor, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2022 - Continues

Professor, Erciyes University, Havacılık Ve Uzay Bilimleri Fakültesi, Uçak Gövde Ve Motor Bakımı, 2015 - 2022

Associate Professor, Erciyes University, Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor, 2010 - 2015

Assistant Professor, Erciyes University, Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor, 2007 - 2010

Lecturer, Erciyes University, Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor, 2004 - 2006

Expert, Erciyes University, Sivil Havacılık Yüksekokulu, Uçak Gövde-Motor, 2001 - 2003

### Academic and Administrative Experience

Dean, Erciyes University, Havacılık Ve Uzay Bilimleri Fakültesi, 2016 - 2020

University Executive Board Member, Erciyes University, Rektörlük, 2016 - 2020

### Advising Theses

Yılmaz İ., Silindirik bir yanma odasındaki türbülanslı reaksiyon akışının sayısal incelenmesi, Postgraduate, F.EKER(Student), 2022

Yılmaz İ., Oksijenle zenginleştirilen sentetik gaz yakıtların yanma kararsızlığının deneysel incelenmesi, Doctorate, B.ALABAŞ(Student), 2021

Yılmaz İ., BİYOGAZ YANMASININ FARKLI SEYREL TİCİLER ALTINDA YANMA KARARSIZLIĞININ DENEYSEL İNCELENMESİ, Doctorate, Y.ÇAM(Student), 2020

Yılmaz İ., Biyogaz yakıtların yanma karakteristiklerinin deneysel incelenmesi, Postgraduate, İ.SİVRİ(Student), 2019

Yılmaz İ., Sentetik yakıtların yanma kararsızlığının deneysel incelenmesi, Doctorate, Ö.ÇAM(Student), 2019

Yılmaz İ., İçten yanmalı bir motorda hidrojenle zenginleştirilmiş metanol-benzin karışımlarının performans ve emisyon etkisinin deneysel incelenmesi, Doctorate, M.TAŞTAN(Student), 2018

Yılmaz İ., Rüzgar türbin kanat profillerinin sayısal ve deneysel incelenmesi, Doctorate, C.TARHAN(Student), 2018

Yılmaz İ., Sentetik gaz yakıtların yanma karakteristiklerinin deneysel incelenmesi, Doctorate, H.YILMAZ(Student), 2018

Yılmaz İ., Mikro hava aracında çırpın kanat profilinin deneysel incelenmesi, Postgraduate, S.KEİYİNCİ(Student), 2015

## Jury Memberships

Associate Professor Exam, Associate Professor Exam, Gazi Üniversitesi, April, 2023

Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul, March, 2022

Associate Professor Exam, Associate Professor Exam, Gazi University, March, 2021

Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul, April, 2020

Associate Professor Exam, Associate Professor Exam, Üniversitelerarası Kurul, October, 2019

Associate Professor Exam, Associate Professor Exam, Gazi University, April, 2018

Associate Professor Exam, Associate Professor Exam, İstanbul Teknik Üniversitesi, October, 2016

Associate Professor Exam, Associate Professor Exam, İstanbul Teknik Üniversitesi, March, 2016

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **N<sub>2</sub> and Ar dilution on the premixed biogas jet flame under external acoustic enforcement**  
ALABAŞ B., YILMAZ İ., ÇAM Y.  
Propulsion and Power Research, vol.12, no.4, pp.486-504, 2023 (SCI-Expanded)
- II. **Effect of oxygen enrichment of Biogas-Hydrogen mixtures in a premixed combustor on the combustion instability and emissions**  
ALABAŞ B., TUNÇ G., TAŞTAN M., YILMAZ İ.  
Fuel, vol.340, 2023 (SCI-Expanded)
- III. **Experimental investigation of the flame characteristics of a fuel mixture with high hydrogen content enriched with oxygen under the externally acoustic enforcement conditions**  
Yılmaz İ., Tunç G., Taştan M., Alabaş B.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12432-12442, 2022 (SCI-Expanded)
- IV. **Examination of combustion characteristics of oxygen enriched synthetic gases mixtures at various acoustic frequencies**  
Alabaş B., Tunç G., Taştan M., Yılmaz İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12365-12376, 2022 (SCI-Expanded)
- V. **Combustion and emission characteristics of premixed biogas mixtures: An experimental study**  
SİVRİ İ., YILMAZ H., ÇAM Ö., YILMAZ İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12377-12392, 2022 (SCI-Expanded)
- VI. **Effect of N<sub>2</sub> dilution on combustion instabilities and emissions in biogas flame**  
YILMAZ İ., ÇAM Y., ALABAŞ B.  
FUEL, vol.308, 2022 (SCI-Expanded)
- VII. **Experimental Investigation of Flame Characteristics of H<sub>2</sub>/CO/CH<sub>4</sub>/CO<sub>2</sub> Synthetic Gas Mixtures**

YILMAZ H., ÇAM Ö., YILMAZ İ.

COMBUSTION SCIENCE AND TECHNOLOGY, vol.193, no.11, pp.1843-1865, 2021 (SCI-Expanded)

- VIII. **Flame and instability characteristics of high hydrogen content gas mixtures**  
YILMAZ H., YILMAZ İ.  
ENERGY, vol.223, 2021 (SCI-Expanded)
- IX. **Experimental investigation of the emission behaviour and flame stability of the oxygen and hydrogen enriched methane under acoustic enforcement**  
Alabaş B., Tunç G., Taştan M., Yılmaz İ.  
FUEL, vol.290, 2021 (SCI-Expanded)
- X. **Effect of oxygen enrichment on the flame stability and emissions during biogas combustion: An experimental study**  
YILMAZ İ., ALABAŞ B., TAŞTAN M., Tunc G.  
FUEL, vol.280, 2020 (SCI-Expanded)
- XI. **Experimental investigation of the oxygen enrichment in synthetic gases flames**  
Alabaş B., Tunc G., Taştan M., Yılmaz İ.  
FUEL, vol.270, 2020 (SCI-Expanded)
- XII. **A comparison study on combustion and emission characteristics of actual synthetic gas mixtures**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
FUEL, vol.263, 2020 (SCI-Expanded)
- XIII. **Experimental investigation of flame instability in a premixed combustor**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
FUEL, vol.262, 2020 (SCI-Expanded)
- XIV. **Effects of synthetic gas constituents on combustion and emission behavior of premixed H-2/CO/CO2/CNG mixture flames**  
YILMAZ H., YILMAZ İ.  
JOURNAL OF THE ENERGY INSTITUTE, vol.92, no.4, pp.1091-1106, 2019 (SCI-Expanded)
- XV. **Combustion and emission characteristics of premixed CNG/H-2/CO/CO2 blending synthetic gas flames in a combustor with variable geometric swirl number**  
YILMAZ H., YILMAZ İ.  
ENERGY, vol.172, pp.117-133, 2019 (SCI-Expanded)
- XVI. **Numerical and experimental investigations of 14 different small wind turbine airfoils for 3 different reynolds number conditions**  
TARHAN C., YILMAZ İ.  
WIND AND STRUCTURES, vol.28, no.3, pp.141-153, 2019 (SCI-Expanded)
- XVII. **Investigation of hydrogen addition to methanol-gasoline blends in an SI engine**  
YILMAZ İ., TAŞTAN M.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.43, no.44, pp.20252-20261, 2018 (SCI-Expanded)
- XVIII. **Combustion characteristics of premixed hydrogen/air flames in a geometrically modified micro combustor**  
Yılmaz İ., Yılmaz H., Çam Ö., İlbaş M.  
FUEL, vol.217, pp.536-543, 2018 (SCI-Expanded)
- XIX. **Effect of different turbulence models on combustion and emission characteristics of hydrogen/air flames**  
YILMAZ H., Cam O., TANGÖZ S., YILMAZ İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.40, pp.25744-25755, 2017 (SCI-Expanded)
- XX. **A numerical study on combustion and emission characteristics of premixed hydrogen air flames**  
Cam O., YILMAZ H., TANGÖZ S., YILMAZ İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.40, pp.25801-25811, 2017 (SCI-Expanded)
- XXI. **Effect of micro combustor geometry on combustion and emission behavior of premixed hydrogen/air flames**  
YILMAZ H., Cam O., YILMAZ İ.

- ENERGY, vol.135, pp.585-597, 2017 (SCI-Expanded)
- XXII. **Effect of swirl number on combustion characteristics of hydrogen-containing fuels in a combustor**  
İLBAŞ M., KARYEYEN S., YILMAZ İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.17, pp.7185-7191, 2016 (SCI-Expanded)
- XXIII. **Effect of Swirl Number on Combustion Characteristics in a Natural Gas Diffusion Flame**  
YILMAZ İ.  
JOURNAL OF ENERGY RESOURCES TECHNOLOGY-TRANSACTIONS OF THE ASME, vol.135, no.4, 2013 (SCI-Expanded)
- XXIV. **Effect of turbulence and radiation models on combustion characteristics in propane-hydrogen diffusion flames**  
YILMAZ İ., TAŞTAN M., İLBAŞ M., TARHAN C.  
ENERGY CONVERSION AND MANAGEMENT, vol.72, pp.179-186, 2013 (SCI-Expanded)
- XXV. **Analysis of turbulent flow and heat transfer over a double forward facing step with obstacles**  
Oztop H. F., Mushatet K. S., YILMAZ İ.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.39, no.9, pp.1395-1403, 2012 (SCI-Expanded)
- XXVI. **Investigation of hydrogen usage in aviation industry**  
YILMAZ İ., İLBAŞ M., TAŞTAN M., TARHAN C.  
ENERGY CONVERSION AND MANAGEMENT, vol.63, pp.63-69, 2012 (SCI-Expanded)
- XXVII. **INVESTIGATION OF POLLUTANT EMISSIONS IN AIRCRAFT GAS TURBINE ENGINES**  
YILMAZ İ., İLBAŞ M.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.27, no.2, pp.343-351, 2012 (SCI-Expanded)
- XXVIII. **Experimental analysis of the effects of hydrogen addition on methane combustion**  
İLBAŞ M., YILMAZ İ.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.36, no.5, pp.643-647, 2012 (SCI-Expanded)
- XXIX. **Experimental investigation of thermoacoustic coupling using blended hydrogen-methane fuels in a low swirl burner**  
YILMAZ İ., Ratner A., İLBAŞ M., Huang Y.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.35, no.1, pp.329-336, 2010 (SCI-Expanded)
- XXX. **EVALUATION OF COMBUSTION MODEL CONSTANT IN COMBUSTION OF HYDROGEN-METHANE MIXTURE**  
YILMAZ İ., İLBAŞ M.  
ISI BILIMI VE TEKNIGI DERGISI-JOURNAL OF THERMAL SCIENCE AND TECHNOLOGY, vol.30, no.1, pp.45-57, 2010 (SCI-Expanded)
- XXXI. **Evaluation of the relationship between exhaust gas temperature and operational parameters in CFM56-7B engines**  
Yılmaz İ.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING, vol.223, no.G4, pp.433-440, 2009 (SCI-Expanded)
- XXXII. **An experimental study on hydrogen-methane mixtured fuels**  
YILMAZ İ., İlbas M.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.35, no.2, pp.178-187, 2008 (SCI-Expanded)
- XXXIII. **Laminar-buming velocities of hydrogen-air and hydrogen-methane-air mixtures: An experimental study**  
İlbas M., Crayford A. P., YILMAZ İ., Bowen P. J., Syred N.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.12, pp.1768-1779, 2006 (SCI-Expanded)
- XXXIV. **Turbulence forced convection heat transfer over double forward facing step flow**  
YILMAZ İ., Oztop H.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, vol.33, no.4, pp.508-517, 2006 (SCI-

Expanded)

- XXXV. **Hydrogen as burner fuel: modelling of hydrogen-hydrocarbon composite fuel combustion and NO<sub>x</sub> formation in a small burner**  
Ilbas M., YILMAZ İ., Veziroglu T., Kaplan Y.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.29, no.11, pp.973-990, 2005 (SCI-Expanded)
- XXXVI. **Investigations of hydrogen and hydrogen-hydrocarbon composite fuel combustion and NO<sub>x</sub> emission characteristics in a model combustor**  
Ilbas M., YILMAZ İ., Kaplan Y.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.30, no.10, pp.1139-1147, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Numerical modeling of momentum, heat transfer and combustion mechanisms of non-premixed swirling flame movement inside a cylindrical combustor**  
EKER F., YILMAZ İ.  
INTERNATIONAL JOURNAL OF ENERGY STUDIES, vol.6, no.2, pp.95-125, 2021 (Peer-Reviewed Journal)
- II. **Swirler geometry effects (Dh/do ratio) on synthetic gas flames. part 2: Dynamic flame behaviour at externally altered acoustic conditions**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
ENERGETIKA, vol.67, pp.55-61, 2021 (Scopus)
- III. **Swirler geometry effects (Dh /do ratio) on synthetic gas flames: Part 1: Combustion and emission characteristics**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
ENERGETIKA, vol.67, pp.48-54, 2021 (Scopus)
- IV. **Comparison of the Numerical Models for the Temperature Distributions of Non-premixed Swirling Methane Flame**  
Tunc G., Yılmaz İ.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.22, no.4, pp.819-826, 2019 (Peer-Reviewed Journal)
- V. **An experimental study on premixed CNG/H-2/CO<sub>2</sub> mixture flames**  
YILMAZ İ., YILMAZ H., ÇAM Ö.  
OPEN ENGINEERING, vol.8, no.1, pp.32-40, 2018 (ESCI)
- VI. **Farklı Rüzgar Türbin Kanat Profillerinin Aerodinamik Performansının Deneysel İncelenmesi**  
YILMAZ İ., ÇAM Ö., TAŞTAN M., KARCI A.  
Politeknik Dergisi, 2016 (Peer-Reviewed Journal)
- VII. **Investigation od small wind turbine airfoils for Kayseri weather conditions**  
TARHAN C., YILMAZ İ.  
Journal of fuels and combustion in engineering, pp.41-42, 2016 (Peer-Reviewed Journal)
- VIII. **Simulation of forced convection flow over an inclined double forward facing step**  
Öztop H. F., Yılmaz İ.  
Int J of Power Engn, vol.40, pp.1112-1121, 2013 (Peer-Reviewed Journal)
- IX. **Acne rosacea associated imatinib mesylate in a gastrointestinal stromal tumor patient**  
Demirci U., COŞKUN U., ERDEM Ö., Ozturk B., YILMAZ İ., BENEKLİ M., BÜYÜKBERBER S.  
Journal of Oncology Pharmacy Practice, vol.17, no.3, pp.285-287, 2011 (Scopus)

## Books & Book Chapters

- I. **Investigation of an Optimal Operating Condition for a Micro Combustor Regarding Basic Thermophotovoltaic System Requirements**  
YILMAZ H., ÇAM Ö., YILMAZ İ.

in: The Role of Exergy in Energy and the Environment, Nizetic S., Papadopoulos A., Editor, Springer Nature, London, pp.27-41, 2018

**II. Investigating the hydrogen-natural gas blends as a fuel in Internal Combustion Engine**  
YILMAZ İ.

in: Alternative Fuels Research Progress, Maher A.R., Sadiq Al-Baghdadi, Editor, CreateSpace Independent Publishing Platform, New York, pp.307-322, 2013

## **Refereed Congress / Symposium Publications in Proceedings**

- I. DYNAMIC FLAME BEHAVIOR OF 30%H<sub>2</sub> 30%CO 20%CO<sub>2</sub> 20% CNG SYNTHETIC GAS MIXTURE DURING ACOUSTIC FORCING**  
Çam Ö., Yılmaz H., Yılmaz İ.  
16th International Combustion Symposium (INCOS 2022), Aydın, Turkey, 8 - 11 September 2022, pp.1-10
- II. The Effect of Oxygen Enrichment on Combustion Instabilities for Synthetic Gases Fuels with Different H<sub>2</sub>/CO Ratios**  
ALABAŞ B., TUNÇ G., TAŞTAN M., YILMAZ İ.  
15th International Combustion Symposium (INCOS 2020), 17 - 19 September 2020
- III. Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (D<sub>h</sub>/D<sub>o</sub>) on Synthetic Gas Flames: Part 1: Combustion and Emission Characteristics**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), 23 - 24 May 2019
- IV. "Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (D<sub>h</sub>/D<sub>o</sub>) on Synthetic Gas Flames: Part 2: Dynamic Flame Behaviour at Externally Altered Acoustic Conditions**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), 23 - 24 May 2019
- V. Comparison of Combustion and Emission Characteristics of Output Synthetic Gas Compositions of Two Different Power Stations**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
VII. Mühendislikte Yakıtlar, Yanma ve Yangın Konferansı (7th International Conference on Renewable Fuels Combustion and Fire – FCE2019), Antalya, Turkey, 10 - 13 March 2019
- VI. Experimental Investigation of the Effect of Swirl Number on the Burning of Synthetic Gases in a Burner**  
ALABAŞ B., TUNÇ G., TAŞTAN M., YILMAZ İ.  
VII. Mühendislikte Yakıtlar, Yanma ve Yangın Konferansı (7th International Conference on Renewable Fuels Combustion and Fire – FCE2019), Kayseri, Turkey, 10 - 12 March 2019
- VII. Laboratuvar ölçekli bir yakıcıda metan hidrojen karışımlarının deneysel incelenmesi**  
ALABAŞ B., TUNÇ G., TAŞTAN M., YILMAZ İ.  
International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), 22 - 23 November 2018
- VIII. Sentetik Gaz Yakıtların Yanma Kararsızlıklarının Deneysel İncelenmesi"**  
YILMAZ İ., YILMAZ H., ÇAM Ö.  
1. Uluslararası GAP Matematik - Mühendislik - Fen ve Sağlık Bilimleri Kongresi, 4 - 07 October 2018
- IX. Yüksek H<sub>2</sub>/CO Oranına Sahip Sentetik Gaz Yakıtların Yanma Karakteristiklerinin Deneysel İncelenmesi**  
ÇAM Ö., YILMAZ H., YILMAZ İ.  
1. Uluslararası GAP Matematik - Mühendislik - Fen ve Sağlık Bilimleri Kongresi, 4 - 07 October 2018
- X. Effect of CO<sub>2</sub> Dilution on Premixed H<sub>2</sub>/CO/CNG Blending Synthesis Gas Flames**  
YILMAZ İ., YILMAZ H., ÇAM Ö., SOYTÜRK M. A.  
16th International Conference on Clean Energy (ICCE-2018), 9 - 11 May 2018

- XI. **An Experimental Study on Effect of Swirl Number and Gas Composition on Combustion and Emission Behavior of Premixed H<sub>2</sub>/CO/CNG Blending Synthetic Gas Flames in a Novel Combustor**  
ÇAM Ö., YILMAZ H., YILMAZ İ.  
16th International Conference on Clean Energy (ICCE-2018), 9 - 11 May 2018
- XII. **Investigation of an Optimal Operating Condition for a Micro Combustor Regarding Basic Thermophotovoltaic System Requirements**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
9th International Exergy, Energy and Environment Symposium (IEEES), Split, Croatia, 14 - 17 May 2017, pp.27-41
- XIII. **İÇTEN YANMALI BİR MOTORDA HİDROJENLE ZENGİNLEŞTİRİLMİŞ METANOL- BENZİN KARIŞIMLARININ PERFORMANS VE EMİSYONA ETKİSİ**  
TAŞTAN M., YILMAZ İ.  
International Advanced Researches and Engineering Congress, Osmaniye, Turkey, 16 - 18 November 2017, pp.683-688
- XIV. **Combustion and Emission Behavior of Premixed CNG/H<sub>2</sub>/CO<sub>2</sub> Mixture Flames: Effect of Swirl Number and Gas Composition**  
YILMAZ İ., ÇAM Ö., YILMAZ H.  
International Research Conference on Sustainable Energy, Engineering, Materials and Environment (SEEME), Newcastle upon Tyne, England, 26 - 28 July 2017
- XV. **Numerical Investigation of Effect of Different Turbulence Models on The Combustion Characteristics by the Probability Density Function (PDF) Model**  
YILMAZ İ., ÇAM Ö.  
International Research Conference on Sustainable Energy, Engineering, Materials and Environment (SEEME), Newcastle upon Tyne, England, 26 - 28 July 2017
- XVI. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro Combustor with Varying Geometric Properties: Part - II Effect of Multi-Channel Arrangement**  
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.  
6th International Conference on Renewable Fuels, Combustion and Fire (FCE'17), Nevşehir, Turkey, 18 - 21 May 2017
- XVII. **Investigation of the Effects of Equivalence Ratio and Thermal Power on the Combustion and Emission Behaviour of Premixed Hydrogen Air Mixture in a Micro Combustor**  
YILMAZ H., YILMAZ İ., ÇAM Ö.  
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017
- XVIII. **Experimental and Numerical Investigations of Small Wind Turbine Airfoils for Low Reynolds Number Condition**  
TARHAN C., YILMAZ İ.  
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017
- XIX. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro Combustor with Varying Geometric Properties: Part - I Effect of Backward Facing Step and Cavity**  
YILMAZ H., ÇAM Ö., İLBAŞ M., YILMAZ İ.  
6th International Conference on Renewable Fuels, Combustion and Fire (FCE'17), Nevşehir, Turkey, 18 - 21 May 2017
- XX. **Investigation of small wind turbine airfoils for Kayseri weather conditions**  
TARHAN C., YILMAZ İ.  
9th International Conference on Sustainable Energy and Environmental Protection, 22 - 25 September 2016
- XXI. **NUMERICAL INVESTIGATION OF NOX EMISSIONS IN A MICRO CYLINDRICAL COMBUSTOR WITH PREMIXED HYDROGEN AIR MIXTURE**  
ÇAM Ö., TANGÖZ S., YILMAZ H., YILMAZ İ.  
9th International Conference on Sustainable Energy and Environmental Protection, 22 - 25 September 2016
- XXII. **THE EFFECT OF DIFFERENT TURBULENCE MODELS ON THE FLAME AND EMISSION CHARACTERISTICS OF HYDROGEN AIR FLAMES**  
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.

9th International Conference on Sustainable Energy and Environmental Protection, 22 - 25 September 2016

**XXIII. EFFECT OF SWIRL NUMBER ON TEMPERATURE LEVELS OF HYDROGEN CONTAINING FUELS IN A COMBUSTOR**

İLBAŞ M., KARYEYEN S., YILMAZ İ.

17. International Conference on Emerging Nuclear Energy Sciences, 4 - 08 October 2015

**XXIV. BOUNDARY LAYER FLOW SEPARATION CONTROL OF TWO DIMENSIONAL NACA 2415 AIRFOIL**

YILMAZ İ., ÇAM Ö., TAŞTAN M.

8. ANKARA INTERNATIONAL AEROSPACE CONFERENCE, 10 - 12 September 2015

## Supported Projects

Yılmaz İ., Project Supported by Higher Education Institutions, Biyogaz Yakıtların Yanma Karakteristiklerinin Deneysel İncelenmesi, 2019 - 2021

Yılmaz İ., Project Supported by Higher Education Institutions, OKSİJENLE ZENGİNLEŞTİRİLEN SENTETİK GAZ YAKITLARIN YANMA KARARSIZLIĞININ DENEYSEL İNCELENMESİ, 2019 - 2021

Yılmaz İ., Project Supported by Higher Education Institutions, Sentetik Gaz Yakıtların Yanma Kararsızlığı Ve Alev Geri Tepmesinin İncelenmesi, 2016 - 2020

Yılmaz İ., TUBİTAK Project, Sentetik Gaz Yakıtların Yanma Kararsızlığı ve Alev Geri Tepmesinin İncelenmesi-, 2016 - 2018

Yılmaz İ., Oktay T., TUBİTAK Project, Taktik İnsansız Hava Aracı (TİHA) Tasarımı, Üretimi ve Otonom Kontrolü ile Teorik ve Pratik Yeni Otonom Performans İyileştirme Yöntemlerinin Uygulamaları, 2015 - 2018

Yılmaz İ., Project Supported by Higher Education Institutions, İÇTEN YANMALI BİR MOTORDA HİDROJENLE ZENGİNLEŞTİRİLMİŞ METANOL-BENZİN KARIŞIMLARININ PERFORMANS VE EMİSYONAETKİSİNİN DENEYSEL İNCELENMESİ, 2014 - 2018

Yılmaz İ., İlbaş M., TUBİTAK Project, Model bir yanma sisteminde kömür gazlarının yanma performanslarının ve emisyon parametrelerinin deneysel olarak incelenmesi, 2014 - 2016

Yılmaz İ., TUBİTAK Project, Farklı Rüzgar Türbin Kanat Profillerinin Aerodinamik Performansının Rüzgar Tünelinde İncelenmesi, 2015 - 2015

Yılmaz İ., Project Supported by Higher Education Institutions, Mikro Hava aracında Çırpan Kanat Profilinin Deneysel İncelenmesi, 2015 - 2015

Yılmaz İ., Project Supported by Higher Education Institutions, Gaz Türbinli Motorda Kompresör İşletme Şartlarının Kompresör Verimine Etkisinin Araştırılması, 2007 - 2008

Yılmaz İ., İlbaş M., TUBİTAK Project, Hidrojen metan Hibrid Yakıt Yanmasının Deneysel Araştırılması, 2005 - 2007

Yılmaz İ., İlbaş M., Project Supported by Higher Education Institutions, Model Bir Yakıcıda Yanma Ve Emisyon Davranışının Deneysel İncelenmesi, 2005 - 2006

Yılmaz İ., İlbaş M., Project Supported by Higher Education Institutions, Geliştirilen Model Yakıcılarda Hidrojen Yanmasının Deneysel ve Nümerik İncelenmesi, 2004 - 2006

## Scientific Refereeing

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, October 2022

## Scientific Consultations

Tübitak Liselerarası İnsansız Hava Araçları Yarışması , Other, Erciyes Üniversitesi, Havaçılık Ve Uzay Bilimleri Fakültesi, Uçak Gövde Ve Motor Bakımı, Turkey, 2021 - 2022

TÜBİTAK-6. Uluslararası İnsansız Hava Araçları Yarışması , Other, Erciyes Üniversitesi, Havaçılık Ve Uzay Bilimleri Fakültesi, Uçak Gövde Ve Motor Bakımı, Turkey, 2020 - 2020

TÜBİTAK- 3. TÜBİTAK Uluslararası İnsansız Hava Araçları Yarışması , Scientific Consultancy, Erciyes Üniversitesi,



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## Awards

Yılmaz İ., 2022 Yılı İlk Yüzde 2'lik Dilime Giren 'En Etkili Bilim İnsanı', Plos Biology Dergisi, October 2023

Yılmaz İ., 2021 yılı ilk yüzde 2'lik dilime giren 'En Etkili Bilim İnsanı', Plos Biology Dergisi, October 2022

Yılmaz İ., 2020 yılı ilk yüzde 2'lik dilime giren 'En Etkili Bilim İnsanı', Plos Biology Dergisi, October 2021

Yılmaz İ., Fen ve Mühendislik Bilimlerinde 2018 Yılı En Yüksek Akademik Teşvik Puanı, Erciyes Üniversitesi Rektörlüğü, November 2019

Yılmaz İ., Proje Performans Ödülü , Tübitak, November 2018

Yılmaz İ., Taştan M., En İyi Makale Ödülü (Best Paper Award), Osmaniye Korkut Ata Üniversitesi, July 2017

Yılmaz İ., Bölüm Birinciliği, Erciyes Üniversitesi Mühendislik Fakültesi Dekanlığı, June 1999